R E P O R T R E S U M E S

ED 019 907 FL 000 850

HIGH-SCHOOL FOREIGN LANGUAGE STUDY AND FRESHMAN PERFORMANCE.

BY- SKELTON, ROBERT B.
NATIONAL FED. OF MODERN LANGUAGE TEACHERS ASSN.

PUB DATE JAN 58

EDRS PRICE MF-$0.25 HC-$0.24 4P.

DESCRIPTORS- *ACHIEVEMENT TESTS, *COLLEGE FRESHMEN, *SECOND LANGUAGE LEARNING, *ACADEMIC ABILITY, *SECONDARY SCHOOL STUDENTS, COLLEGE PREPARATION, STATISTICAL DATA, READING COMPREHENSION, PSYCHOLOGICAL TESTING, ACADEMIC ACHIEVEMENT, MODERN LANGUAGES, LANGUAGE RESEARCH, ALABAMA POLYTECHNIC INSTITUTE,

SIX ACHIEVEMENT TESTS IN DIFFERENT SUBJECT AREAS THAT WERE ADMINISTERED TO COLLEGE FRESHMEN RESULTED IN BETTER PERFORMANCES BY STUDENTS WITH A FOREIGN LANGUAGE BACKGROUND. DESPITE VARIOUS EXPLANATIONS OFFERED (INTELLIGENCE, MOTIVATION), THE SUPERIORITY PERSISTS WHEN COMPARISON IS MADE WITH CITY HIGH SCHOOL PRODUCTS, GRADE POINT AVERAGE, OR HONOR ROLL REPRESENTATION. BASED ON STATISTICAL ANALYSIS AND EXPERIENCE, ONE CONCLUSION THAT CAN BE MADE IS THAT FOREIGN LANGUAGE STUDY IMPROVES COMMAND OF ONE'S OWN LANGUAGE, AND THUS ONE'S CONTROLLING ABILITY IN OTHER AREAS OF STUDY WHERE LANGUAGE IS THE VEHICLE OF INSTRUCTION. THIS ARTICLE IS A REPRINT FROM "THE MODERN LANGUAGE JOURNAL," VOLUME 42, NUMBER 1, JANUARY 1958, PAGES 8-10. (AF)

ED019007

HIGH-SCHOOL FOREIGN LANGUAGE STUDY AND FRESHMAN PERFORMANCE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

BY

ROBERT B. SKELTON

FL 000 850

Reprinted from
THE MODERN LANGUAGE JOURNAL
Vol. XLII, No. 1, January, 1958

High-School Foreign Language Study and Freshman Performance

THE basis for this study[1] is the Registrar's Report on the scores obtained by students matriculating at Alabama Polytechnic Institute in Sept., 1955. These students were subjected to a battery of six tests: *Mechanics of Expression* (grammar, punctuation, capitalization, and spelling); *Effectiveness of Expression* (sentence structure and style, diction, and organization of thought); *Reading Comprehension* (recognition vocabulary, reading speed, and level of comprehension); *American History; Mathematics* (arithmetic, algebra, geometry, and trigonometry); *Psychological Examinations*, one measuring basic intelligence (problem solving, figure analogies, and number series) and yielding a "Q" score, and the other measuring linguistic ability (recall vocabulary).

The results of these examinations are presented both in raw scores and in decile rankings. Since we are concerned with comparisons within the group only, decile rankings have been used in the interest of simplicity. Averages and differences are presented in percentiles.

The 1,647 students who submitted to this battery were separated into two groups, one with foreign language in high school and one without. The criterion was one semester or more, whether passed or failed. Obviously, the minimum exposure to FL considered could not be expected to exhibit much transfer value; the criterion was so established in order to avoid the possibility of a selection factor.

Accordingly, 953 were labeled "Non-FL" and 694, "FL." Of the latter, 546 had presented a recommended minimum of two years or more. Averages of this group designated as "2+FL" are given whenever possible for whatever additional light they may shed on the question.

To those who have followed the controversy over this aspect of the value of foreign language study, these results come as no surprise. The superiority of students presenting foreign language credit has been clearly established by studies during the last 25 years.[2] The chief merit of this effort, perhaps, is that the results have been measured in objective test scores rather than in grade averages alone. We will have not met the objections of the critics, who have insisted that "the apparent superiority is due only to the fact that the students who elected foreign language were more intelligent to begin with." The next aspect of the study is designed to answer this objection.

TABLE 1

GROUP AVERAGES ON SIX ACHIEVEMENT TESTS

	Mechanics	Effectiveness	Reading Compre.	Linguistic Ability	History	Mathematics
FL	63.6	61.9	64.6	65.4	58.6	59.4
Non-FL	44.3	45.8	46.2	46.9	49.9	49.2
Diff.	19.3	16.1	18.4	18.5	8.7*	10.2*
2+FL	66.8	63.3	66.6	67.1	59.8	61.0
Non-FL	44.3	45.8	46.2	46.9	49.9	49.2
Diff.	22.5	17.5	20.4	20.2	9.9	11.8

* Sampling indicates that Non-FL students had an average of one semester more mathematics and one semester more history in high school, which likely explains the decreased superiority of the FL students on these two tests.

The two groups were divided next according to their intelligence level as established by Psychology "Q." Averages were computed for each group at each decile of intelligence and in each of the achievement tests. Even a cursory examination of the results makes it obvious that intelligence alone cannot explain the superiority.

Let us examine only those students who attended high schools of the three largest cities in the state—Birmingham, Montgomery, and

[1] This article first appeared in *School and Society*, June 8, 1957. It is here reprinted with the kind permission of both the journal and author.

[2] *E.G.*, R. A. Brown, *Journal of the Michigan Schoolmasters Club*, 1930; C. F. Ross, *School and Society*, July 4, 1931; M. J. Nelson, *School and Society*, Feb. 25, 1933.

TABLE 2

DIFFERENCES IN AVERAGE SCORES BY INTELLIGENCE LEVEL

"Q" Decile	10	9	8	7	6	5	4	3	2	1
Mechanics										
FL	80.8	75.4	75.0	63.6	63.9	59.4	54.1	54.9	50.1	38.3
Non-FL	66.5	55.1	60.5	49.3	46.8	42.9	40.5	39.5	36.6	25.3
Diff.	14.3	20.3	14.5	14.3	17.1	16.5	13.6	15.4	13.5	13.0
Effectiveness										
FL	76.3	77.5	77.2	65.5	62.9	57.7	55.5	48.8	45.4	29.6
Non-FL	69.1	63.2	61.2	57.1	48.1	40.6	45.4	39.0	30.7	24.2
Diff.	7.2	14.3	16.0	8.4	14.8	17.1	10.1	9.8	14.7	5.4
Reading Comprehension										
FL	82.2	79.1	77.6	66.1	68.5	59.4	55.4	50.0	50.4	37.4
Non-FL	70.0	62.0	68.5	55.6	48.7	43.6	43.9	40.8	34.2	28.3
Diff.	12.2	17.1	9.1	10.5	19.8	15.8	11.5	9.2	16.2	9.1
Linguistic Ability										
FL	85.9	78.7	78.1	67.8	66.9	60.2	56.4	51.4	51.9	39.6
Non-FL	73.1	61.1	65.4	57.8	53.1	44.6	43.0	40.8	32.9	25.0
Diff.	12.8	17.6	12.7	10.0	13.8	14.6	13.4	10.6	19.0	14.6
History										
FL	71.3	68.4	74.4	65.5	58.3	55.3	52.3	46.9	41.3	40.9
Non-FL	67.5	57.8	67.0	57.6	52.0	48.9	49.8	42.6	40.5	37.0
Diff.	3.8	10.6	7.4	7.9	6.3	6.4	2.5	4.3	0.8	3.9
Mathematics										
FL	80.7	78.0	67.5	64.4	55.8	53.5	50.7	44.2	40.0	33.5
Non-FL	78.4	64.8	69.5	57.4	54.3	45.9	40.8	41.3	34.1	27.7
Diff.	2.3	13.2	−2.0*	7.0	1.5	7.6	9.9	2.9	5.9	5.8

* Non-FL exceed FL. This is the only instance in the whole study, and, in view of the excessive difference at Q 9, is obviously due to an unusual distribution.

Mobile. There were 150 "Non-FL" in this group and 235 "FL," of which 198 qualify as "2+FL." The results support the original conclusions.

	Mech.	Eff.	Read.	Ling.	Hist.	Math.
2+FL	67.9	64.2	68.5	69.4	62.1	59.9
FL	64.9	63.2	66.6	67.8	60.7	59.1
Non-FL	42.4	48.6	51.9	48.1	53.6	48.1

Of the above group, Sidney Lanier High School, at Montgomery, was the largest single contributor with 59 "FL" and 54 "Non-FL." Group averages for these students were:

	Mech.	Eff.	Read.	Ling.	Hist.	Math.
FL	73.4	66.8	72.9	73.7	63.9	60.0
Non-FL	43.9	46.7	49.8	48.9	49.3	45.7

A comparison of these scores on the basis of "Q" level gives results comparable to those presented in Table 2.

Motivation was suggested as a possible explanation for the persistent superiority of the FL group. Direct measurement of the quality is not feasible, but examination of a single group, more homogeneous in regard to its aims and ideals, should give an indication as to the validity of the suggestion. Scores of those students enrolled in the School of Education were examined for this purpose. There were 54 "Non-FL" and 78 "FL," of which 70 were "2+FL." The results follow:

	Mech.	Eff.	Read.	Ling.	Hist.	Math.
2+FL	76.1	60.0	65.4	68.9	47.4	41.5
FL	73.8	58.3	63.1	66.7	47.4	40.7
Non-FL	53.0	36.0	40.6	42.8	32.8	29.8

A comparison of these scores on the basis of "Q" level gives results comparable to those presented in Table 2.

Fall Quarter honor-point averages of the entire group are presented according to decile of intelligence. The honor-point system is A–3, B–2, C–1, D–0, and F–0.

Decile	10	9	8	7	6	5	4	3	2	1
2+FL	1.64	1.53	1.54	1.28	1.20	1.22	1.23	1.16	1.08	.82
FL	1.63	1.42	1.48	1.26	1.14	1.17	1.18	1.05	.99	.77
Non-FL	1.18	1.12	1.17	1.08	.94	.89	.81	.80	.71	.60

Assuming 1.00 as indicative of a graduation potential, only the four upper deciles of the Non-FL as compared to the upper eight (or nine) of the FL appear capable of performing work successfully on the college level. The average for the entire group was 1.05, a score attained by the FL students at the third decile (second, for the 2+FL) and by the Non-FL at the seventh. In this particular instance, it seems reasonable to conclude that FL study has been tantamount to raising the student's "Q" score by some 40 percentage points.

Assignment of the group to remedial section was enlightening. To Remedial English went 40.6% of the Non-FL as compared to 16.8% of the FL and 14.6% of the 2+FL. To Remedial Mathematics went 38.1% of the Non-FL, 27.6% of the FL, and 26.9% of the 2+FL.

Of the Non-FL group, 15.2% dropped voluntarily before the end of the Spring Quarter as compared to 11.5% of the FL and 11.0% of the 2+FL. On probation or suspension at the end of the first year were 20.7% of the Non-FL, 10.2% of the FL, and 6.1% of the 2+FL. On the honor roll for the Winter Quarter (only one for which complete data were available) were .64% of the Non-FL, 1.62% of the FL, and 1.68% of the 2+FL.

This study established a highly significant superiority of students presenting high-school FL over their non-FL counterparts in each of the six achievement tests, whether as groups or on intelligence level. The superiority persists when comparison is applied to city high-school products only, to students from one single high school, to those enrolled in the same college division, to grade-point averages, assignment to remedial levels, resignations—both voluntary and otherwise—and honor-roll representation. Furthermore, students offering two or more years FL surpassed those offering less than two by about the same margin as these surpassed the Non-FL group.

We have not taken into account planetary influences, relative humidity, broken homes, or the possibility that students who try harder on examinations naturally gravitate to the study of certain subjects. Would the results have been analogous had the dichotomy been on a science: non-science basis, for example? Previous studies make it appear unlikely. Is it a question, perhaps, of college-bound? No college in Alabama either requires or even recommends high-school FL preparation.

Statistical analysis, reason, and the experience of generations force us to the conclusion that the study of foreign language *does* improve one's command of his own language, thereby enhancing one's control of subject matter in fields in which language is the vehicle of instruction.

ROBERT B. SKELTON
Alabama Polytechnic Institute